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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,499	11/05/2003	Shinji Tai	245062US	6280

22850 7590 08/27/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

EGWIM, KELECHI CHIDI

ART UNIT	PAPER NUMBER
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1713

NOTIFICATION DATE	DELIVERY MODE
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08/27/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/700,499	Applicant(s) TAI ET AL.	
	Examiner Dr. Kelechi C. Egwim	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) 18-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/680,966.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |



DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/31/2007 has been entered.

Election/Restrictions

2. Claims 18-22 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 14, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Negi et al. (JP'656), for reason cited in the previous action.

Claim Rejections - 35 USC § 103

5. Claims 14, 16 and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, 35 U.S.C. 103(a) as being unpatentable over Negi et al. (JP'736 or JP'757).

6. Claims 14, 16 and 17 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, 35 U.S.C. 103(a) as being unpatentable over Hata et al., for reason cited in the previous action.

Response to Arguments

7. Applicant's arguments filed 05/31/2007 have been fully considered but they are not persuasive.

8. While applicant continues to contend that none of the cited prior art satisfies all the formulas (1) to (7), they fail to support this with specifics. For instance JP '656, teaches two different saponified vinyl acetate/ethylene copolymers (A, which corresponds with B2 in the present claims) and (B, which corresponds with B1 in the present claims).

FOR THE LOW ETHYLENE COPOLYMER

COPOLYMER	Wt % in Blend	Ethylene content in copolymer	Degree of saponification
B1	60 –90%	25-40%	>99%

Common Range between B1 and B	60 – 90%	25-40%	99-100%
B	30-94%	25-40%	>96

FOR THE HIGH ETHYLENE COPOLYMER

COPOLYMER	Wt % in Blend	Ethylene content in copolymer	Degree of saponification
B2	10 –40%	35-48%	92-99%
Common Range between B2 and A	10 – 40%	45-48%	96-99%
A	6-70%	45-60%	>96

Further, with regard to claims 16 and 17, on pages 12 and 13 of the translation, JP '656 teach melt index ratios from 0.05 to 20 and a blend melt index from 0.1 to 20 g/10 min.

9. Regarding the particles size of the dispersed phase (A/B2), this is an inherent feature of the composition and percentage of the dispersed phase, given the overlapping ranges in the composition, it remains reasonable that the particle sizes of the prior art dispersed phase within the common range would be the same as that presently claimed by applicant. No outside treatment not taught in the cited prior art is disclosed as resulting in the claimed dispersed particle sizes.

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10. Regarding Negi et al., JP '736 teach that the degrees of saponification of copolymer (A) is greater than that of copolymer (B), or stated another way, $DS(A) - DS(B)$ is greater than zero, which encompassed the claimed range of 1-8.

11. Regarding Negi et al. '757, in the abstract, Negi et al. teach

$$4 \leq ETB2 - ETB1, \text{ and}$$

$$3 \leq SDB1 - SDB2$$

Thus, the requirements for rejection are met

12. As previously stated, Hata et al. teaches a range of 6 to 19 for $ET(B) - ET(A)$ and a range of 0 to 3.7 for $SD(A) - SD(B)$ in Hata et al. Each of which, at least, overlap with applicant's claimed ranges of 8 to 23 and 1 to 8, respectively.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kelechi C. Egwim whose telephone number is (571) 272-1099. The examiner can normally be reached on M-T (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCE



KELECHI C. EGWIM PH.D.
PRIMARY EXAMINER